

Sustainable development at the heart of our strategy

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Abstract

With trainings and research oriented towards sustainable development since 2006 (Water and Sanitation, Infrastructure, Renewable Energies and Energy Processes), Foundation 2iE is positioning itself as a reference institute that trains innovative engineers-entrepreneurs for the needs and challenges of Africa's development.

Center of Excellence of the UEMOA and the World Bank, CSR is at the heart of the Strategy of the institute which aims to be a showcase in this field in Africa.

Thus, several major actions were carried out from 2009 to 2017:

- A CSR diagnosis which enabled us to take stock of our social and Environmental practices in accordance with the Burkinabe legislation,
- Membership in the global compact of the United Nations and the commitment to communicate our progress on the respect of the 10 principles
- Membership in the conference of the high school of Paris and the publication of two CSR reports according to their CSR reporting framework
- The introduction of the eco-citizenship course for bachelors and the introduction of CSR management for Masters.
- The development of continuous training on climate change, green growth and social green business for the benefit of end-of-training students and public administration officers and project and program managers.

Moreover, 2iE is a member and provides the executive secretariat of the multi-stakeholder forum for CSR in the mining sector in Burkina Faso; with domains of interest such as research and innovation in which engineers can propose local technical solutions for the control of environmental aspects.

The objective of this article taken from the CSR 2016 audit report is to share our sustainable development practices with the organizations participating in this workshop and also to learn from their innovative practices in order to lay the foundations of a network of institutes Committed to the challenges of sustainable development.

In order to meet the international requirements for Social and Environmental Responsibility / Sustainable Development, in 2009 the 2iE Foundation joined the Conférence des Grandes Ecoles and in 2010 the Principles of Responsible Management of Education (PRME) of the Global Compact United Nations. The principles of the Global Compact are 10 in number and are grouped into the four main areas:

- human rights ;
- labor conditions ;
- the environment ;
- the fight against corruption.

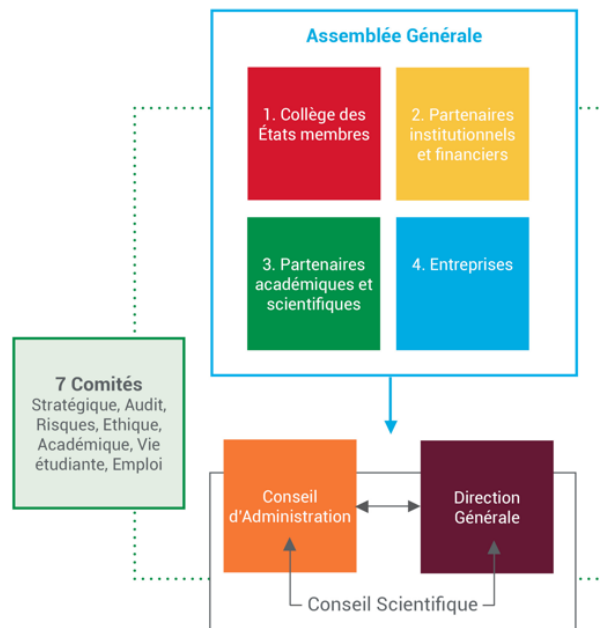
These areas are the same as some evaluation axes of the CGE reference. 2iE then produces annual reports on sustainable development and CSR in order to assess its practices in this area and to compare itself with other member schools

Here are the innovations operated by 2iE according to the axes of the cge / cpu repository.

STRATEGY AND GOVERNANCE:

Governance implies the definition of measurable objectives in the short, medium and long term by relevant mechanisms and the resources (human and material) deployed to achieve these objectives. The vision at 2ie is to put sustainable development at the heart of the institute's strategy. At the 2iE Foundation, the Strategic Orientation Plan (POS 2011/2015) is the reference document in this field. It presents 8 specific objectives evaluated through 80 indicators, 20 of which are measured on a biannual basis; With CSR being included in the specific objective 7: "To make 2iE a showcase for social and environmental responsibility in West Africa".

To achieve this objective 2iE is based on its innovative model of governance, comprising the following stakeholders: General Assembly (Member States, companies, institutional and financial partners, academic and scientific partners), Board of Directors (Member States) Committees (strategic, audit, risks, student life, ethics, academics, employment).



EDUCATION AND TRAINING



With research, education and training is the mainspring of the Foundation 2iE. In POS 2011/2015 the specific objective 4 "Training engineers and managers capable of innovating and undertaking to create jobs and respond to the challenges of the Africa of tomorrow" is devoted to the teaching and training.

Training that meets international standards



Center for training and research excellence in the fields of water, environment, energy infrastructure and mining, the Foundation 2iE is the only institute of reference in Africa whose diplomas are accredited by the Commission of Engineer Titles CTI and the EUR ACE Label; The training offer is also ISO 9001 certified. The 2iE Foundation is also a center of excellence of the Community of West African States (ECOWAS), the West African Economic and Monetary Union (UEMOA)), The New Partnership for Africa's Development (NEPAD) and the World Bank. The establishment is also a member of the World Water Council.

Sustainable development in trainings

The trades that 2iE form all relate to sustainable development: Bachelors, Masters and PhD in specialties such as Water and Environmental Engineering, Civil Engineering, Energy Engineering and Industrial Processes and eco-innovation. Nevertheless, in order to make our engineering students aware of the ethical social and environmental issues in order to stimulate a new development model (Green Growth) in their respective countries, we have introduced the following courses: Project Eco citoyen pour les Bachelors 2 and Management of CSR for the Master 1. Every year since 2012, 50 to 70 students in Master 2 benefit from the continuous training "Responsible Entrepreneur" which deals with taking into account the environmental, social and economic stakes in the Strategy in Africa. Indeed, the positive economic growth of many African countries encourages us to train responsible engineers who also benefit from courses such as innovation and creativity, the quality approach in organizations, the sociology of development, the study of Environmental and social impact that equip them with appropriate skills to understand the social responsibility of companies.



Training: Responsible Entrepreneur 2016

EU Conference UE on climate change

World Bank recruitment program

Business School – Entrepreneurship

2iE's vision for training is to train engineers-entrepreneurs, and for this purpose, the 2iE Technopole Center for Technological Innovation has developed initiatives such as Junior Enterprise, Entrepreneurial Journey, Green Startup Challenge, Club Let's talk about Development, coaching to the personal professional project the mentoring program and the Business Days.



GSUC Coaches and coordinators 2iE Secretary-General and Director of Technopôle giving prize to the 1st and 2nd laureates

Professional insertion

Finally, in order to improve the training offerings, vocational integration surveys are conducted twice a year and measure the insertion rate 6 months and one year after graduation. The latest surveys targeting 2015 graduates reported an insertion rate of 44% after 6 months and 72% after 1 year.

Satisfaction surveys are also conducted with companies to collect their opinions on the performance of 2iE graduates, and their skills needs. Data from these surveys are discussed during the Circle of HRD on the occasion of the Business Days; And the recommendations are formulated to inform the new offers proposed by the Directorate of Studies.



5 finalists of ISC

Winner of ISC 2016

Job Forum Team

Business Days

The Business Days are a forum for meetings and exchanges between students and companies. The eleventh edition of the Business Days brought together 1000 participants, 46 international and national companies and 16 exhibitors. The main activities of this event, which covers 3 days, are: the animation of the stands, the employment forum, the circle of HRDs, the final of "the entrepreneurship journey".



SOCIAL POLICY AND TERRITORIAL ANCHORING

The Foundation 2iE is committed to a social policy and sustainable territorial anchorage. This was achieved through the specific objectives 1 and 2 of POS 2011/2015. Specific objective 1 is to "increase student access to 2iE by ensuring socio-economic, linguistic, national and gender diversity".

Specific objective 2 is to "attract and train a world-class faculty and reverse the brain drain".

Social actions

For Students

Indeed, the 2iE Foundation promotes a human and social policy of parity and diversity among its students and staff through:

- The promotion of fellowship programs, which aims to increase the access of students from different backgrounds to 2iE on an equal opportunity basis in order to promote an excellent cultural, linguistic and social mix. In 2016, there are 1220 students of 23 nationalities, 36% of whom are fellows financed by institutions (AfDB, FAE, World Bank, UEMOA, French Ministry of Foreign Affairs, DAAD ...). Such as the WASH Master.
- The association of the African scientific diaspora in the most prestigious universities in North America, Europe and Asia, which participates in the development of education while ensuring a diversification of the teaching staff.

Also, the 2iE Foundation promotes skills development and internal mobility through:

- The establishment of scientific partnerships with universities in Africa and the rest of the world to ensure the mobility of the teaching staff in order to ensure the valorization and development of skills.
- The implementation of a mobility program for students enabling them to ensure mobility in partner universities at 2iE.

Finally, the 2iE Foundation ensures a policy of quality of life in the establishment for both students and staff through:

- The construction of housing and sports facilities to ensure a peaceful and conducive environment for study;
- A large number of students are housed on the two sites of the Foundation 2iE.

For the Staff

Apart from students, social policy also targets staff who is an important stakeholder in the institute's viability.

Thus, the legislative and regulatory framework for labor law in 2iE is the Burkina Labor Code, the statutes and the internal regulations of 2iE. It governs employer-employee relations and serves as a basis for the resolution of disputes.

The staff consists of 186 employees of different nationalities with 24% women 17% 2iE graduates.

Services such as security, maintenance of the living environment and catering are subcontracted with providers to whom will be popularized our CSR policy so that they also integrate criteria of sustainability in their services.

2iE workers are represented by union delegates (F-Synter and USTB). While the coexistence of these two power stations may have been at times conflictual, it remains above all a sign of democratic vitality and the principle of freedom of association and opinion. This has favored the mutualisation of their energies to find solutions to the crisis suffered by the institute since 2013.

In order to stimulate the motivation of the staff several initiatives have been put in place:

- 80% of the health insurance for management staff and 50% for reimbursement of medical expenses and 80% for the hospitalization of non-management staff.
- The existence of a solidarity mutual which offers material, financial and moral assistance in case of marriage, death and / or birth.
- An annual stipend of CFAF 50 000 per child is granted to 2iE staff. Parents, whose children are studying at 2iE, also benefit from a tuition fee reduction of 25% per year.

To restore the climate of conviviality, a group of staff initiated in 2016 aerobics and football gymnastics sessions that bring together staff and students every Thursday in the afternoon.



Aerobics sessions



soccer party half-time

Territorial anchorage

2iE is resolutely a pan-African institute (16 member states on the board of directors) and internationally oriented (UEMOA pole of excellence, World Bank). Thus, students from 2iE, which has 27 nationalities on site, come from continents Africa, Europe, Asia and North America. It has a network of 7,500 graduates.

In November 2012, 2iE was elected to the Board of Governors of the World Water Council, representing "Professional Associations and Academic Institutions". It has also been identified by the World Innovation Summit for Education (WISE), among the 15 innovative cases in education worldwide.

Advocacy for CSR

In Burkina Faso 2iE is identified as a pioneer in CSR. In this capacity, he participated as a founding member in the creation of the Multi-stakeholder Forum for Corporate Social Responsibility (CSR Forum). He has been the executive secretary since 2012 (the year the Forum was created). Our commitment to the CSR Forum is to help mining companies optimize their production and have less social and environmental impact; this through research and innovation in which engineers can propose local solutions for the development of this sector.



CSR Forum 2017 Annual General Meeting

In order to share CSR concepts with stakeholders other than mining companies, 2iE has developed a partnership with the France-Volunteer association to run CSR-themed cafés every quarter for the sharing of good practices and to propose Expertise on audit-strategy-reporting and CSR communication. These coffee-thematic groups mobilize at each edition about thirty companies and associations of all sectors.



1st and 2nd CSR thematic-coffee November 2016 and February 2017

RESEARCH ACTIVITIES



The Research Policy is transversal and multidisciplinary in areas such as: Water, Energy, Infrastructure, Environment) integrated into the institution's strategy (POS 2011/2015 Objective 3) accompanied by a specific HR policy for

researchers Research engineers, 40 doctoral candidates and 104 teacher-researchers with advances in rank and salaries according to CAMES and the salary scale for teachers of 2iE). This specialized human resource is used in research programs with a multi-annual budget commitment financed by 21 institutional and financial partners such as the ADB, the World Bank, Swiss Cooperation, AFD, German Cooperation.... With a regular evaluation policy, a strategy of cooperation with other national and / or international partners.

The 2iE Doctoral School is supported by 60 academic partners and 32 scientific partners.

These partnerships facilitate collaboration among research institutions, the mobility of researchers internationally and the transfer of knowledge and technology.

The results of the research are published and awarded each year through the Doctorials, which are presentations of current or completed research by PhD students and research professors. The fruits of the research are also published through the collections of the conference proceedings of the "2iE Scientific Day".



Presidium of Doctorials 2016

2 laureates with the Director of doctoral school

Participants

ENVIRONMENTAL MANAGEMENT

The 2iE Foundation is an African reference on environmental issues. These issues are dealt with in a holistic manner in the specific objectives 4 and 7 of the POS 2011/2015.

Specific objective 4 is to "train engineers capable of innovation and entrepreneurship in order to create jobs and meet the challenges of the Africa of tomorrow".

Specific objective 7 is to "make 2iE a showcase for environmental and social responsibility".

Through the implementation of these two specific objectives of POS 2011/2015, the results of the audit 2016 place the environmental management axis at Level 3 "Compliance with the objectives of the Green Plan" with a score of 35/65.

Sensitization

Indeed, through the specific objective 4, the 2iE Foundation trains and trains engineers in Africa who have received training focused on preserving the environment. The latter work for the prevention and reduction of environmental damages in their workplace.

Regular series of conferences on global environmental issues are also held for staff and students.

Development of environmental management tools

Also in line with specific objective 7, the 2iE foundation has developed the Carbon Identity Card for companies or organizations wishing to know about their greenhouse gas (GHG) emissions. Knowledge of the amount of GHGs emitted helps to set reduction targets and develop mechanisms to achieve them. The 2iE Foundation measures its carbon footprint to reduce its emissions with the Carbon Identity Card. Thus, two carbon balances were carried out in 2009 and 2011.

The comparative analysis of the 2009 and 2011 studies shows that even if the CO₂ amount increased from 3896 Teq.CO₂ to 4280 Teq.CO₂ due to the doubling of the student body (650 in 2009 and 1251 in 2011), the CO₂ emissions decreased from 5.99Teq.CO₂ in 2009 to 3.42 Teq.CO₂ in 2011. This reduction is explained by the communication about eco-actions in the eco-responsibility manual with a view to Limit the consumption at the level of fixed sources, water and electricity indexed in the CIC 2011 (40% of CO₂ emissions). The valorisation of eco-materials, especially for the construction of rooms, would also contribute to this reduction.

Energetic transition

In terms of energy, 2iE has started the process towards autonomy by producing 64 kWh of solar energy, ie 4.4% of its electricity consumption in 2012. By 2016, solar energy represented only 0.75% of the electricity consumption of 2iE.

Waste water and solid waste management

The existence of a sewage treatment plant where wastewater is treated, thus offering the opportunity to reuse treated wastewater to water trees and green spaces, reduced water consumption in 2011; Recent studies carried out by (Mandeng, 2012) and (Tongouro, 2012) are currently confirming the proper functioning of the STEP. However, due to the state of the castle's defects, the waters from the STEP are now rejected in nature through the channel passing through the University of Ouagadougou.



2iE's Waste water treatment plant

Regarding (household and similar waste), their management is provided by the company IMMODEV itself subscribing to a contractor for a collection contract.

In order to comply with the SOP 2011/2015, ie "have an integrated waste management policy for the composting of organic waste and the transformation of plastic waste", the vision is to valorisation rather than disposal. Studies on the characterization of waste are initiated and the results in the internship reports and academic projects are quite interesting and deserve to be considered.

Preservation of biodiversity

In terms of biodiversity, the forest estate of 2iE is a legacy of biodiversity of extraordinary wealth that must be preserved at all costs. Species useful in all respects such as *Sclerocarya birrea*, *Acacia nilotica*, *Acacia seyal*, *Mitragyna inermis* etc. Remain there but the last ten years have been marked by the degradation of this ecosystem through the firewood cuts and the samplings by the traditional healers. This situation calls for an awareness of the indigenous population around the forest, its restoration in an academic project and its ecotouristic valorisation.



Deforested area for agriculture



Massive cutting of natural trees



Domain devastated, drainage system networks realized by loosters



Woman leaving the estate after stolen wood from dead trees

CONCLUSION

After 5 years of implementation of the Strategic Orientation Plan, which has aimed at its specific objective 7 to make 2iE a showcase for CSR in Africa, the results are very positive because many acquisitions can be credited to the account of The will of the top management to maintain the institute in international standards and to involve it in the networks of advocacy and sharing good practices (UN Global Compact, CSR Forum, CSR Thematic Café with France Volunteers). Thus, on the 5 strategic axes proposed by the CGE / CPU reference system, the current performance levels are as follows:

- Strategy and governance: Level 4 Maitrise
- Social policy and territorial anchoring: Level3 Compliance
- Teaching and training: Level 4 Maitrise
- Research: Level 4 Maitrise

- Environment: Level 3 Compliance

CSR is a participatory, continuous improvement and exchange of know-how in which the input of all stakeholders (staff, students, donors, service providers, clients) through their Self and enthusiasm, and their creativity can change attitudes and create a new positive dynamic with the benefit of leverage effects.

REFERENCES

- Foundation 2iE 2016: Book of Innovations
- Foundation 2iE 2015: Review of research activities
- CPU / CGE 2008: The 2008-2009 guide to good practices in sustainable development in French universities
- Foundation 2iE 2012. Student Booklet 2012-2013
- Foundation 2iE 2012. 2iE: An International Institute of Higher Education and Research in the Heart of Africa
- Foundation 2iE 2012. Official presentation "Reality and perspectives"
- Foundation 2iE 2012. Horizon 2020 Research Strategy
- Foundation 2iE 2011. 2iE Code of Ethics
- Foundation 2iE 2011. POS 2011/2015
- Foundation 2iE 2011. 2iE Corporate Social Responsibility Report (November 2011)
- Foundation 2iE 2011: Final Report CIC 20112iE a resource center for the emergence of a responsible private sector in Africa.
- Foundation 2iE 2010. 2iE Corporate Social Responsibility Report (June 2010)
- KPAI 2011: Management of Liquid and Solid Chemical Wastes in Secondary Laboratories: the case of LBEB (laboratory biomass energy and biofuels) and LEDES (laboratory water decontamination, ecosystems and health)